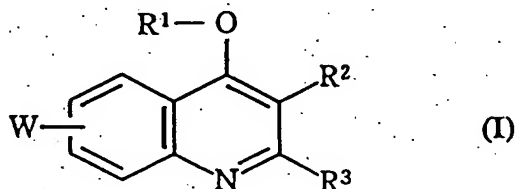


# AMENDED CLAIMS

[received by the International Bureau on 15 October 1998 (15.10.98);  
original claim 1 amended; remaining claim unchanged (3 pages)]

1. A 4-quinolinol derivative represented by the general formula (I):



wherein

R<sup>1</sup> represents

a hydrogen atom,  
an alkali metal,  
an alkaline earth metal, or

COR<sup>4</sup> in which R<sup>4</sup> is

a hydrogen atom,  
an optionally substituted C<sub>1</sub>-C<sub>18</sub> alkyl group,  
an optionally substituted C<sub>2</sub>-C<sub>18</sub> alkenyl group,  
an optionally substituted C<sub>3</sub>-C<sub>10</sub> cycloalkyl group,  
an optionally substituted phenyl lower alkyl group,  
an optionally substituted phenoxy lower alkyl group,  
an optionally substituted aryl group,

OR<sup>5</sup> in which R<sup>5</sup> is an optionally substituted lower alkyl group, an optionally substituted aryl group, an optionally substituted heterocycle, an optionally substituted phenyl lower alkyl group or an optionally substituted phenoxy lower alkyl group, or

NR<sup>6</sup>R<sup>7</sup> in which R<sup>6</sup> and R<sup>7</sup> are each a hydrogen atom, an optionally substituted C<sub>1</sub>-C<sub>6</sub> alkyl group or an

optionally substituted phenyl group, or  $R^6$  and  $R^7$  together with N may form a four- to six-membered ring containing one or two heteroatoms;

$R^2$  represents an optionally substituted lower alkyl group;

$R^3$  represents

an optionally substituted  $C_1$ - $C_{18}$  alkyl group,

an optionally substituted lower alkenyl group, or

an optionally substituted lower alkoxy group; or

$R^2$  and  $R^3$  together represent  $-(CH_2)_m-$  in which m is 3 or 4;

and

W represents 1 to 4 substituents on the nucleus which may be identical or different and each of which is

a halogen atom,

an optionally substituted  $C_1$ - $C_{10}$  alkyl group,

an optionally substituted lower alkenyl group,

an optionally substituted lower alkynyl group,

an optionally substituted  $C_1$ - $C_{10}$  alkoxy group,

an optionally substituted  $C_3$ - $C_{10}$  cycloalkyl group,

an optionally substituted aryl group,

an optionally substituted aryloxy group,

$NR^8R^9$  in which  $R^8$  and  $R^9$  are each a hydrogen atom, an optionally substituted  $C_1$ - $C_6$  alkyl group or an optionally substituted phenyl group, or  $R^8$  and  $R^9$  together with N may form a four- to six-membered ring containing one or two heteroatoms,

$COR^{10}$  in which  $R^{10}$  is a hydrogen atom, an optionally substituted lower alkyl group or an optionally substituted lower alkenyl group,

$COOR^{11}$  in which  $R^{11}$  is a hydrogen atom, an optionally substituted lower alkyl group or an optionally substituted lower alkenyl group,

a nitro group, or

a cyano group;

provided that, compounds represented by the formula (I) in which  $R^1$  represents hydrogen;  $R^2$  represents methyl or ethyl;  $R^3$  represents methyl,  $-\text{CH}_2-\text{CH}=\text{CH}-(\text{CH}_2)_5-\text{CH}_3$ ,  $-\text{CH}(\text{OH})-\text{CH}=\text{CH}-(\text{CH}_2)_5-\text{CH}_3$ ,  $-\text{CH}(\text{OH})-\text{C}(\text{C})(\text{CH}_2)_5-\text{CH}_3$ ,  $-\text{CH}=\text{CH}-\text{CH}_2-(\text{CH}_2)_5-\text{CH}_3$  or  $-\text{CH}_2-\text{C}(\text{C})(\text{CH}_2)_5-\text{CH}_3$ ; and W represents 1 to 4 substituents on the nucleus which may be identical or different and each of which is halogen,  $\text{C}_1$ - $\text{C}_{10}$  alkyl,  $\text{C}_1$ - $\text{C}_4$  haloalkyl,  $\text{C}_1$ - $\text{C}_4$  alkoxy or nitro; and compounds represented by the formula (I) in which  $R^1$  represents  $\text{COR}^4$  in which  $R^4$  is hydrogen,  $\text{C}_1$ - $\text{C}_{18}$  alkyl,  $\text{C}_2$ - $\text{C}_{18}$  alkenyl, optionally substituted  $\text{C}_3$ - $\text{C}_{10}$  cycloalkyl, phenyl lower alkyl, phenoxy lower alkyl or aryl;  $R^2$  represents  $\text{C}_1$ - $\text{C}_4$  alkyl;  $R^3$  represents  $\text{C}_1$ - $\text{C}_{10}$  alkyl,  $\text{C}_1$ - $\text{C}_4$  alkenyl,  $-\text{CH}_2-\text{CH}=\text{CH}-(\text{CH}_2)_5-\text{CH}_3$ ,  $-\text{CH}(\text{OH})-\text{CH}=\text{CH}-(\text{CH}_2)_5-\text{CH}_3$ ,  $-\text{CH}(\text{OH})-\text{C}(\text{C})(\text{CH}_2)_5-\text{CH}_3$ ,  $-\text{CH}=\text{CH}-\text{CH}_2-(\text{CH}_2)_5-\text{CH}_3$  or  $-\text{CH}_2-\text{C}(\text{C})(\text{CH}_2)_5-\text{CH}_3$ , or  $R^2$  and  $R^3$  together represent  $-(\text{CH}_2)_m-$  in which m is 3 or 4; and W represents 1 to 4 substituents on the nucleus which may be identical or different and each of which is halogen,  $\text{C}_1$ - $\text{C}_{10}$  alkyl or  $\text{C}_1$ - $\text{C}_4$  alkoxy, are excluded; and agriculturally and horticulturally acceptable acid addition salts thereof.